Thirty (30) subjects were dosed in Period 3. Thirty-one (31) subjects are included in the pharmacokinetic analysis and the statistical analyses. Subjects 10 (ABC) and 18 (CAB) completed only Period 1 of the study. These subjects were not included in the pharmacokinetic dataset. Subjects 29 (ABC) and 33 (ABC) completed Periods 1 and 2, receiving Treatments A and B. Both subjects are included in the pharmacokinetic dataset.

Pharmacokinetics:

The following pharmacokinetic parameters were estimated using a non-compartmental approach: C_{max}, AUC_t, AUC_{inf}, AUC0-0.5, AUC0-2, AUC0-3, AUC0-4, T_{max}, Kel, and T_{half}.

Safety:

An assessment of safety was based primarily on the frequency and severity of AEs. There was no formal evaluation of safety or tolerability.

Statistical Methods:

Descriptive statistics are estimated for the pharmacokinetic parameters in each treatment.

Analysis of variance (ANOVA) was performed on log-transformed C_{max}, AUC_t, AUC_{inf}, AUC0-0.5, AUC0-2, AUC0-3, AUC0-4 and on untransformed T_{max}, Kel and T_{half} parameters. The significance of the sequence, period, treatment and subject-within-sequence effects was tested.

Using the same statistical model, the least-squares-means, the differences between the treatments least-squares-means and the corresponding standard errors of these differences were estimated for log-transformed C_{max}, AUC_t, AUC_{inf}, AUC0-0.5, AUC0-2, AUC0-3, AUC0-4 parameters. Based on these statistics, the ratios of the geometric means for treatments and the corresponding 90% confidence intervals were calculated for the following contrasts:

Treatment A versus Treatment C (relative bioavailability under fasting conditions)

Treatment B versus Treatment A (food effect for the test formulation)

Summary-Conclusions:

Pharmacokinetic and Statistical Results of MPH ER Chewable Tablets 40 mg Versus Methylin™ 10 mg Chewable Tablets

	Geometric Mean		Ratio	90% Confidence Limits		Intra-Sub
MPH	Test	Reference	(%)	Lower	Upper	CV (%)
C_{max} (ng/mL)	12.1	15.1	80.0	76.3	83.9	11
$AUC_{(0-t)}$ (ng · h/mL)	107.4	122.7	87.6	84.9	90.4	7
$AUC_{(0-inf)}$ (ng · h/mL)	113.6	127.5	89.1	86.6	91.7	7

These statistics were used to evaluate the performance of the test formulation in relation to the reference product and the test product as fed versus fasting.

Pharmacokinetic and Statistical Results of MPH ER Chewable Tablets 40 mg, Fed Versus Fasting Study

	Geometric Mean		Ratio	90% Confidence Limits		Intra-Sub
MPH	Fed	Fasting	(%)	Lower	Upper	CV (%)
C_{max} (ng/mL)	12.6	12.1	104.1	99.4	108.9	11

-continued

	Geometric Mean		Ratio	90% Confidence Limits		Intra-Sub
MPH	Fed	Fasting	(%)	Lower	Upper	CV (%)
$AUC_{(0-t)}$ (ng · h/mL)	129.6	107.5	120.6	117.0	124.3	7
$AUC_{(0-inf)}$ (ng · h/mL)	137.9	113.6	121.4	118.0	124.9	7

Treatment A: Methylphenidate HCl Extended Release 40 mg chewable tablets—Fasting

Treatment B: Methylphenidate HCl Extended Release 40 mg chewable tablets—Fed

Treatment C: Methylin™ 10 mg chewable tablets—Fasting

Safety Results:

There were no deaths, Serious Adverse Events (SAEs), or other significant adverse events during the conduct of this study. None of the AEs had a significant impact on the safety of the subjects or on the integrity of the study results.

CONCLUSIONS

All treatments under either fasted or fed conditions were well tolerated by all subjects in the study. Based on the results of the study, the test product has similar maximum and peak absorption characteristics when administered under fasting and fed conditions. There is no significant food effect on the test product.

Methylphenidate HCl 40 mg ER chewable tablets produce a mean peak concentration 20% lower than b.i.d. administration of 20 mg of the Methylin™ 10 mg product. The total exposure is similar starting at approximately 4 hours.

All patents, patent publications, and other publications listed in this specification, as well as prior U.S. patent application Ser. No. 14/872,226, filed Oct. 1, 2015, which is a continuation of U.S. patent application Ser. No. 14/624,998, filed Feb. 18, 2015, now U.S. Pat. No. 9,180,100, which is a continuation of U.S. patent application Ser. No. 14/300,580, filed Jun. 10, 2014, now U.S. Pat. No. 8,999,386, prior International Patent Application No. PCT/US2013/054930, filed Aug. 14, 2013 and US Provisional Patent Application Nos. 61/774,783, filed Mar. 8, 2013 and 61/683,513, filed Aug. 15, 2012, are incorporated herein by reference. While the invention has been described with reference to a particularly preferred embodiment, it will be appreciated that modifications can be made without departing from the spirit of the invention. Such modifications are intended to fall within the scope of the appended claims.

The invention claimed is:

1. A method for treating a patient with a disorder treatable by methylphenidate, said method comprising providing said patient with an effective amount of a methylphenidate extended release chewable tablet which is a uniform solid dispersion comprising:

(a) a sustained release racemic methylphenidate component comprising a water-insoluble, water-permeable, pH-independent barrier coated, racemic methylphenidate—ion exchange resin complex in a polymeric matrix, wherein said barrier coating which provides a sustained release profile to the racemic methylphenidate is over the racemic methylphenidate—ion exchange resin complex-matrix;

(b) a first immediate release component which comprises an immediate release uncoated racemic methylphenidate—ion exchange resin complex;